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(54) Selektive Kurzschlussstromschutzeinrichtung.

(57) Selektiver Hauptsicherungsautomat

Bei bekannten selektiven Hauptsicherungsautomaten wird die Trennstelle im Hauptstrompfad periodisch geschlossen, wodurch bei einer Kurzschlußstromaßschaltung in einem bestimmten Kurzschlußstrombereich daraus höhere Durchlaß-I^2t-Werte resultieren.

Diesem Problem wird abgeholfen dadurch, daß nach erfolgter Begrenzung des ersten Kurzschlußimpulses die Rückschließung der Hauptkontaktstelle erst bei Nennbetriebsverhältnissen erfolgt und von einer in einem parallel zum Hauptstrompfad geschalteten Nebenstrompfad befindlichen Selektivitätseinrichtung (33) zeitgesteuert ist.

Bevorzugtes Anwendungsgebiet des neuen selektiven Hauptsicherungsautomaten sind Niederspannungsverteileranlagen insbesondere Gebäudeinstallationen.

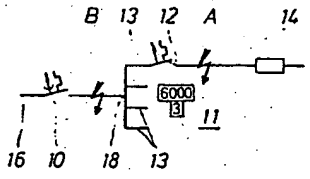


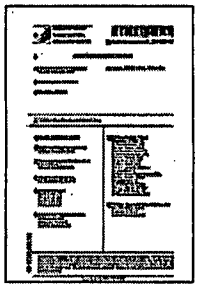
Fig.1

EP 0 350 829 A2

Title: **EP0350829B1: Selective protective device against short-circuit currents**[German][French]

Derwent Title: Selective short-circuit current protection in distribution network - involves limitation of initial fault current pulse followed by main contactor reclosure using timed selectivity switch [Derwent Record]

Country: **EP** European Patent Office (EPO)
Kind: **B1** Patent ! (See also: EP0350829A2, EP0350829A3)



High Resolution
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15 pages

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Priority Number: 1988-07- **DE1988003823975**

Abstract: [From equivalent EP0350829A2] Selective automatic main circuit-breaker In known selective automatic main circuit-breakers, the disconnection point in the main current path is periodically closed, resulting in higher I2t let-through values given a short-circuit

current disconnection in a given short-circuit current range. This problem is remedied, in that, after the first short-circuit pulse has been limited, the re-closing of the main contact point is carried out only given nominal operating conditions, and is time-controlled by a selectivity device (33) located in a shunt current path connected in parallel with the main current path. Preferred application area of the novel selective automatic main circuit-breaker are low-voltage distribution systems, especially building installations.

Attorney, Agent or Firm: **Rupprecht, Klaus, Dipl.-Ing. et al** ;

INPADOC Legal Status: Show legal status actions **Get Now:** Family Legal Status Report

Designated Country: AT BE CH DE FR GB IT LI

Family:

PDF	Publication	Pub. Date	Filed	Title
	EP0350829B1	1995-11-29	1989-07-10	Selective protective device against short-circuit currents
	EP0350829A3	1991-07-17	1989-07-10	Selective protective device against short-circuit currents
	EP0350829A2	1990-01-17	1989-07-10	Selective protective device against short-circuit currents
	DE58909512C0	1996-01-11	1989-07-10	SELEKTIVE KURZSCHLUSSSTROMSCHUTZEINRICHTUNG.
	DE3823975A1	1990-01-18	1988-07-15	Selektive Kurzschlussstromschutzeinrichtung
	AT0130957E	1995-12-15	1989-07-10	SELEKTIVE KURZSCHLUSSSTROMSCHUTZEINRICHTUNG.
6 family members shown above				

Description
Expand description

Die Erfindung betrifft einen selektiven Hauptsicherungsautomat gemäß dem Oberbegriff des Anspruches 1.

First Claim: Show all claims 1. Selective main protective miniature circuit-breaker (10) for the selective disconnection of short-circuit current in electrical distribution networks which each have individually protected loads (14), the main protective miniature circuit-breaker being used for the selectively staggered protection of the loads (14)

of a load network against short-circuit currents and over-currents in a load (14), selectively with respect to the remaining loads (14), having a main current path (24) and having an auxiliary current path (34) which is connected in parallel therewith, having a main contact point (26) which is arranged in the main current path (24) and has at least one fixed and one movable contact element, having an electromagnetic instantaneous release (30) which is likewise arranged in the main current path (24) and cooperates with a main switching mechanism (28) which is connected to the movable contact element of the main contact point (26) and is operatively connected to a manual switching handle (42) and an overcurrent release (32) arranged in the main current path (24), and having in each case one incoming and one outgoing terminal (20, 22), characterized in that a latching device (29) is provided, in which the movable contact element (27), which is struck open as a result of a short circuit, of the main contact point (26) latches into place, in that the auxiliary current path (34) which is connected to the main current path (24) at the terminals (20, 22) has a selectivity device (33) which cooperates with the latching device (29), in that the selectivity device (33) which is excited by a short-circuit current brings about, in a time-controlled manner, the unlatching of the movable contact element, and in that there is arranged in the auxiliary current path (34) a second overcurrent release (38) which is connected in series with the coil (35), cooperates with the main switching mechanism (28) and, in the event of tripping due to a short-circuit current that is present, automatically brings about the opening of a further contact point (40) arranged in the auxiliary current path (34) as well as the further opening of the contact element (27) of the main contact point (26) right into the "off" position, as a result of which the load network (13) is isolated from the supply network (16).
[German] [French]

Other Abstract Info: DERABS G90-016177